

AMENDMENTS TO THE SPECIFICATION

In the Title:

Please amend the title as follows:

~~DATA TRANSMISSION SYSTEM~~ HYBRID SR/GBN MODE REQUEST REPEAT  
COMMUNICATION SYSTEM

In the Specification

Please replace the third full paragraph on page 3 of the specification with the following rewritten paragraph:

A transmission station divides data to create frames with transmission numbers, and adds error detection bits to such frames to transmit the same. A receiving station performs detection of an error whenever receiving such frames, and checks transmission numbers with respect to only frames free of an error. Re-transmission is demanded when it is judged ~~Judging~~ that frames have disappeared in the case where discontinuity occurs in transmission numbers ~~having that have~~ that have been checked, ~~re-transmission is demanded~~.

Please replace the paragraph bridging pages 5 and 6 with the following rewritten paragraph:

Further, there is assumed, for example, a case, in which two facing stations A, B are not discriminated between a transmission station and a receiving station and forward data independently of

each other, that is, either of the stations serves as a transmission station, which transmits a frame (referred below to as fresh frame) transmitted freshly and a frame (referred below to as re-transmission frame) retransmitted on the basis of a re-transmission demand as well as a receiving station for transmitting a re-transmission demand frame. ~~In the case where~~ When the B station detects consecutive frame errors, ~~and~~ although the number  $y$  of consecution is great, a specified value  $n_3$  is set to meet  $n_3 > y$ , and it is required that the B station transmit  $y$  re-transmission demand frames, on which identifiers of SR are set. However, there is caused a problem in the case where it is demanded to transmit a fresh frame to the A station from the B station at the same time. In the case where the  $y$  re-transmission demand frames were temporarily made preferential, transmission of the fresh frame would be delayed to lead to a delay in data in a direction toward the A station from the B station. Conversely, ~~in the case where~~ when the fresh frame were was temporarily made preferential, a time, at which the re-transmission demand frames reach, would be late, so that a time, for which frames being re-transmitted in a direction toward the B station from the A station are delayed, would be prolonged.

Please replace the paragraph bridging pages 6 and 7 with the following rewritten paragraph:

Also, a round trip delay is a duration elapsed from an initial point, at which a transmission station transmits a certain frame, until a receiving station recognizes an error in the frame to issue a re-transmission demand frame and the transmission station receives the re-transmission demand frame to re-transmit the same frame. It is assumed, for example, a state, in which such round trip delay is great. In the GBN mode, since all frames including and succeeding an error frame are re-transmitted upon request of re-transmission, frames transmitted during such round trip delay are wasted to lower the throughput, and in the case of a great round trip delay, an amount of such lowering becomes very large. At this time, with a specified value set small, GBN is frequently actuated to lower the throughput exceedingly.

Please replace the 4<sup>th</sup> full paragraph on page 16 of the specification with the following rewritten paragraph:

In such case, it is ~~first~~ judged whether a frame error has been detected three times or more in the past (S2). In the case where it is judged in S2 that a frame error has not been detected three times in the past, an initial value is set as the GBN start threshold (S3).

Please replace the paragraph bridging pages 30 and 31, and the full paragraph following thereafter, with the following rewritten paragraphs:

This comprises detecting the occurrence of an error in three frames, of which the transmission number is 2, 3, 4, when a frame of the transmission number 5 is received at the point of time  $t_1$  in, for example, Fig. 11. Also, since there is almost no frame forwarded to the first station 100 from the second station 200, a GBN start threshold is set 4, and re-transmission demand frames, to which a identifier of SR and the transmission number are added, are transmitted three times because the number of consecutive error frames is 3. Also, the occurrence of an error in three frames, of which the transmission number is 102, 103, 104, is detected when a frame of the transmission number 105 is received at the point of time  $t_2$ . Also, since frames forwarded to the first station 100 from the second station 200 are ~~existent in abundance~~ abundant, a GBN start threshold is set 3, and re-transmission demand frames, to which identifiers of GBN are added, is transmitted one time because the number of consecutive error frames is 3.

Thus, since a GBN start threshold is set judging from an amount of frames being forwarded, such that a GBN start threshold is set to a small value to decrease the number of re-transmission demand frames in the event of ~~[[an]]~~ a large amount of data transmission ~~being much~~, the need of transmitting many re-

transmission demand frames is prevented from occupying a transmission band in a direction, in which re-transmission demand is to be transmitted, and causing delay due to incapability of implementing an ordinary data transmission. Also, in the case where data transmission is small in amount, a GBN start threshold is set to be large, so that retransmission can be carried out in the SR method and so throughput is enhanced.